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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,036	02/04/2002	Seema Kataria	SNY-P4233	4981

  

24337	7590	12/19/2007
MILLER PATENT SERVICES		
2500 DOCKERY LANE		
RALEIGH, NC 27606		

  

EXAMINER	
NGUYEN BA, HOANG VU A	

  

ART UNIT	PAPER NUMBER
2623	

  

MAIL DATE	DELIVERY MODE
12/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	Application No. 10/067,036	Applicant(s) KATARIA, SEEMA	
	Examiner Hoang-Vu A. Nguyen-Ba	Art Unit 2623	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 October 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on October 9, 2007 has been entered.
2. Claims 1-36 remain pending. Claims 1, 13, 25 and 26 are independent claims.

### ***Response to Amendment***

3. Per Applicant's request, Claims 1, 15, 23 have been amended.

### ***Response to Arguments***

4. Applicant's arguments have been fully considered but they are not moot in view of the new grounds of rejection.

### ***Claim Rejections – 35 USC §112***

5. The following is a quotation of the second paragraph of the 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1, 11, 15, 23, 26, 33 are rejected under 35 U.S.C. §112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 1, 11, 15, 23, 26, 33 recite the limitation "a [size] threshold," to which that of a bitmap image is compared in order to determine the next logical step in the

process, e.g., converting the digital bitmap image or skipping this step. Since claims are to be interpreted in light of the disclosure in order to clearly and distinctly determine the scope of the claimed element for infringement purposes, the full content of the specification has been reviewed for further details about the value or range of values of the claimed threshold. However, no specific information thereof has been provided so that a skilled person in the art would know what the claimed threshold is or the scope of such a threshold. Without a clear definition, either in the claim and/or in the written description, of the threshold, one of ordinary skill in the art could not ascertain the metes and bounds of the claimed threshold. The claims are thus indefinite. What if the threshold is set to such a high number that no conversion is necessary and thus there is no converting step at all and the invention is now only a one-step process which is the step of sending the analog image to the consumer device via an analog interface. In such a case then, what would be the novelty of the invention.

Accordingly, any arguments that this claimed threshold provides patentable distinction over the prior art will be unpersuasive.

### ***Claim Rejections – 35 USC § 103***

7. The following is a quotation of the 35 U.S.C. § 103(a) which form the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 11-15, 21-23, 25-26 and 33-36 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent Application Publication No. 02-121589 by Tesujiro in view of Japanese Patent Application Publication No. 07-313449 by Shigeru et al. ("Shigeru").

### Claim 1

Tetsujiro discloses a method of *transmitting images from a producer device to a consumer device, comprising at the producer device:*

*determining that a digital bitmap image is larger in size than a size threshold (see Purpose and Constitution; it is noted that Tetsujiro's picture element data is interpreted to encompass the size of a bitmap image is made up of dots/pixels);*

*upon determining that the digital bitmap image is larger in size than the size threshold (see at least Purpose and Constitution; e.g., "... a threshold value is supplied to the other input of a comparator circuit 17...").*

Tetsujiro does not specifically disclose the remaining steps of the claim.

However, in an analogous art of image processing, Shigeru discloses:

*converting the digital bitmap image to an analog image (see at least Constitution, "... , and reconverted by digital analog converters 19R... into analog signals; and the analog video signals by the colors..."); and*

*sending the analog image to the consumer device (see at least Constitution, "... are sent to the output terminal 13 for ...").*

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the technique of Shigeru with that of Tetsujiro because the combined technique would improve the process of reproducing picture.

#### Claim 14

Claim 14 is an independent claim that recites *an electronic storage medium which, when executed on a programmed processor, carry out the method steps of Claim 1.*

Therefore, Claim 14 is also rejected for the same reasons set forth in Claim 1.

#### Claim 15

Tetsujiro discloses *a method of transmitting images from a producer device to a consumer device, comprising at the producer device:*

*determining if a digital bitmap image is larger in size than a threshold and if the digital bitmap image is larger is size than the threshold* (see Purpose and Constitution; it is noted that Tetsujiro's picture element data is interpreted to encompass the size of a bitmap image is made up of dots/pixels).

Tetsujiro does not specifically disclose the remaining steps of the claim.

However, in an analogous art of image processing, Shigeru discloses:

*converting the digital bitmap image to an analog image* (see at least Constitution, "... and reconverted by digital analog converters 19R... into analog signals; and the analog video signals by the colors...");

*sending a control message as an audio video control (AVC) command to the consumer device to switch from a digital input to an analog input to receive the analog image* (see at least Constitution, "... are sent to the output terminal 13 for ...");

*sending the analog image to the consumer device as an overlay on an analog television signal* (see at least Shigeru, Constitution; e.g., "... and the analog video signals ... are sent to the output terminal 13).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the technique of Shigeru with that of Tetsujiro because the combined technique would improve the process of reproducing picture.

The combination Tetsujiro-Shigeru does not specifically disclose *wherein the digital images are sent using EIA775a protocol over an IEEE 1394 digital connection.*

However, as a result of the comparison stage performed in Tetsujiro, if the size of the bitmap is smaller than a preset threshold, the decision to not perform thinning could be changed to send the bitmap map image to the consumer device via digital channel using a EIA775a protocol over an IEEE 1394 digital connection. One of ordinary skill in the art would have been motivated to do so to take advantage of the fast transfer through IEEE-1394-based transmission medium and not loose any of the digital image quality.

#### **Claim 22**

Claim 22 is an independent claim that recites *an electronic storage medium storing instructions which, when executed on a programmed processor, carr[ies] out* the method of Claim 15. Therefore, Claim 22 is rejected for the same reasons set forth in Claim 15.

#### **Claim 23**

Claim 23 is an independent claim that recites a method of *transmitting images from a television set-top box to a digital television, comprising at the set-top box* (see at least p. 5; section 2.1, 1<sup>st</sup> ¶; p. 62, sections A.1.B & A.1.C) the same method steps of Claim 15. Therefore, Claim 23 is rejected for the same reasons as set forth in Claim 15.

#### **Claim 26**

Tetsujiro discloses *a producer device* (e.g., device that produce input signals to the Tetsujiro's comparator) comprising:

*means for receiving digital content containing a bitmap image* (see at least Constitution, two picture element data (a) and (b));

*means for determining a size of the bitmap image* (see Purpose and Constitution; it is noted that Tetsujiro's picture element data is interpreted to encompass the size of a bitmap image which is commonly known to be made up of dots/pixels).

Tetsujiro does not specifically disclose the remaining steps of the claim.

However, in an analogous art of image processing, Shigeru discloses:

*means for converting the bitmap image to an analog representation in the event the size of the bitmap image exceeds a threshold* (see at least Constitution, "... , and reconverted by digital analog converters 19R... into analog signals; and the analog video signals by the colors..."); *and*

*an analog output circuit for sending the analog representation to the consumer device* (see at least Constitution, "... are sent to the output terminal 13 for ...").

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the technique of Shigeru with that of Tetsujiro because the combined technique would improve Tetsujiro's process of reproducing picture.

Tetsujiro does not specifically disclose *a digital output circuit for sending digital information to a consumer device*. However, as a result of the comparison stage performed in Tetsujiro, if the size of the bitmap is smaller than a preset threshold, the decision to not perform thinning could be changed to send the bitmap map image to the consumer device via digital channel. One of ordinary skill in the art would have been



motivated to do so to take advantage of the fast transfer through IEEE-1394-based transmission medium and not loose any of the digital image quality.

### **Claims 11 and 33**

Rejections of base claims 1 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose *sending digital bitmap images to a digital input in the consumer device when the digital bitmap images are smaller than the threshold.*

However, as a result of the comparison stage performed in Tetsujiro, if the size of the bitmap is smaller than a preset threshold, the decision to not perform thinning could be changed to send the bitmap map image to the consumer device via digital channel. One of ordinary skill in the art would have been motivated to do so to take advantage of the fast transfer through IEEE-1394-based transmission medium and not loose any of the digital image quality.

### **Claims 12 and 34**

Rejections of base claims 1 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose *wherein the digital images are sent using EIA775a protocol over an IEEE 1394 digital connection.* However, as a result of the comparison stage performed in Tetsujiro, if the size of the bitmap is smaller than a preset threshold, the decision to not perform thinning could be changed to send the bitmap map image to the consumer device via digital channel using a EIA775a protocol over an IEEE 1394 digital connection. One of ordinary skill in the art would have been motivated to do so to take advantage of the fast transfer through IEEE-1394-based transmission medium and not loose any of the digital image quality.

**Claims 13, 21, 25 and 35**

Rejections of base claims 1, 15, 23 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru further discloses *wherein the analog image is sent as one of an NTSC and PAL format analog image* (see at least Shigeru, Constitution; e.g., "... and the analog video signals ... are sent to the output terminal 13).

**Claim 36**

The rejection of base claim 26 is incorporated. Tetsujiro further discloses *wherein the means for determining the size comprises a programmed processor* (see at least Consitution, e.g., the comparator circuit 17).

9. Claims 2-10, 16-20, 24 and 27-32 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Japanese Patent Application Publication No. 02-121589 by Tetsujiro in view of Japanese Patent Application Publication No. 07-313449 by Shigeru et al. ("Shigeru") and further in view of Draft EIA-775A, DTV 1394 Interface Specification ("775A-1394 Interface").

**Claims 2 and 27**

Rejections of base claims 1 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, 775A-1394 Interface discloses *sending a control message to the consumer device to switch from a digital input to an analog input to receive the analog image* (see at least p. 49, 2<sup>nd</sup> & 3<sup>rd</sup> ¶¶s).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the 775A-1394 standard to send a control message to the consumer device to switch from a digital input to an analog input to receive the analog image as specified by the 775A-1394 standard. One of ordinary skill in the art would have been motivated to use such a standard for sending a control message (as suggested in Tetsujiro as transmitting a control code – see Purpose in Tetsujiro) to the consumer device in order to improve the process of reproducing pictures (see Purpose in Tetsujiro).

### **Claims 3 and 16**

Rejections of base claims 1 and 15, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, 775A-1394 Interface discloses *sending a control message to the consumer device to switch from the analog input back to the digital input to receive digital images after the analog image has been sent* (see at least sections 3.3; 4.11; 5, e.g., – introduction--; 5.10.3; 6.1-2; 9, e.g., 9.3.4).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the 775A-1394 standard to send a control message to the consumer device to switch from the analog input back to the digital input to receive digital images after the analog image has been sent, as specified by the 775A-1394 standard. One of ordinary skill in the art would have been motivated to use such a standard for sending a control message (as suggested in Tetsujiro as transmitting a control code – see Purpose in Tetsujiro) to the consumer device in order to improve the process of reproducing pictures (see Purpose in Tetsujiro).

#### **Claims 4 and 28**

Rejections of base claims 1 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, 775A-1394 Interface discloses *wherein the digital input comprises an IEEE 1394 digital input* (see at least section 1, e.g., Introduction & FIG. 3, e.g., Input to Image Buffer & Control, DTV CPU & Application, SDTV & HDTV MPEG Decode).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use IEEE-1394 digital input in the combination Tetsujiro-Shigeru because the digital bitmap image could then be evaluated by the combined technique in order to improve the process of reproducing pictures (see Purpose in Tetsujiro).

#### **Claims 5, 6 and 29**

Rejections of base claims 1 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, 775A-1394 Interface discloses *wherein the control message comprises an audio video control (AVC) command* (see at least sections 5.9-10; 6).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the IEEE-1394 digital standard in the combination Tetsujiro-Shigeru because this would allow audio-video control commands to be sent to the consumer device.

#### **Claims 7 and 17**

Rejections of base claims 1 and 15, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, the 775A-1394 Interface discloses *wherein the digital bitmap image comprises a graphical user interface (GUI) image* (see at least section 3.2).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the GUI image as taught in the IEEE-1394 standard in the combination Tetsujiro-Shigeru because this would allow a user to set parameters such as threshold values of control functions.

#### **Claims 8 and 18**

Rejections of base claims 1 and 15, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, the 775A-1394 Interface discloses *wherein the digital bitmap image comprises a television program guide image* (see at least section 3.2; p. 33, 4<sup>th</sup> ¶).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the 775A-1394 Interface standard in the combination Tetsujiro-Shigeru because this would allow the combination to be used in a television environment.

#### **Claims 9, 19 and 31**

Rejections of base claims 1, 15 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, the 775A-1394 Interface discloses *wherein the consumer device comprises a digital television* (see at least FIG. 3, e.g., DTV receiver).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the 775A-1394 Interface standard in the combination Tetsujiro-Shigeru because this would allow the combination to be used in a digital television environment.

**Claims 10, 20 and 32**

Rejections of base claims 1, 15 and 26, respectively, are incorporated. The combination Tetsujiro-Shigeru does not specifically disclose the claimed feature.

However, the 775A-1394 Interface discloses *wherein the producer device comprises a television set-top box* (see at least p. 6, 1<sup>st</sup> ¶).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the 775A-1394 Interface standard in the combination Tetsujiro-Shigeru because this would allow the combination to be used in a television environment.

**Claims 24 and 30**

Rejections of base claims 23 and 26, respectively, are incorporated. These claims recite the same limitations of the combined Claim 17 and 18. Therefore Claims 24 and 30 are also rejected for the same reasons set forth in these claims.

***Conclusion***

10. The prior art made of record and nor relied upon is considered pertinent to Applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Hoang-Vu A. Nguyen-Ba whose telephone

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number is (571) 272-3701. The Examiner can normally be reached on Tuesday - Friday from 7:00 – 17:30.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's Supervisor, John Miller can be reached at (571) 272-7353.

The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application should be directed to the TC 2600 Group receptionist: 571-272-2600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ANTONY NGUYEN-BA  
PRIMARY EXAMINER  
TECHNOLOGY CENTER 2100

December 18, 2007